

RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE

IN THE U.S. PATENT AND TRADEMARK OFFICE

September 16, 2003

Applicant(s): Kunio ARIMOTO, et al.

For: COLORED, TRANSPARENT FILM-FORMING COMPOSITION, ITS
COATING METHOD AND REMOVING METHOD OF A FILM THEREOF

Serial No.: 09/761 988 Group: 1765

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Commissioner for Patents
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DECLARATION UNDER 37 CFR 1.132

I, the undersigned, hereby declare as follows:

I am one of the co-inventors of the invention described and claimed in application Serial No. 09/761 988, filed on January 16, 2001.

I hereby incorporate herein the contents of the Examples and the Comparative Example contained on pages 10-18 of the "clean" copy of the substitute specification.

I have conducted additional tests to illustrate the superiority of the film-forming composition of the present invention over the comparative film-form compositions of U.S. Patent No. 5 063 114 to Nambu, et al.

Film-forming compositions were fabricated according to the disclosure of Nambu, et al by mixing an acrylic silicon based polymer (YC3623) and a hardener (BT120S) as commercial product ① and a second acrylic silicon based polymer (YC3372) and the hardener (BT120S) as commercial product (2), at the

weight ratio of 10:1 of polymer to hardener, with C.I. Pigment Yellow 154, which was dispersed in dipropylene glycol monomethyl ether in an amount of 1% by weight and mixed with commercial products ① and ② at a weight ratio of 1:1.

A film-forming composition according to Example A-2 on page 11 of the "clean" copy of the present specification was prepared and C.I. Pigment Yellow 154 dispersed in dipropylene glycol monomethyl ether in an amount of 1% by weight was mixed therewith at a weight ratio of 1:1.

Identical new glass boards were pre-processed by rubbing them five times with a sponge containing a household dish washing detergent (neutral:detergent 23% including polyoxyethylene alkylether, fatty acid alkanol amide, alkyl ether sulfuric ester sodium), then washed and cleaned.

10 grams of the respective mixtures were impregnated into a non-woven cloth, coated at a temperature of 26°C and humidity of 50% on the pre-processed glass boards having dimensions of 10 cm (length) x 6 cm (width) and allowed to dry naturally. The results are shown in the following Table.

Test Items		Example A-2 of present invention	Commercial product ① of Nambu et al	Commercial product ② of Nambu et al.
Pre-processing of glass board		Pre-processing P	Pre-processing P	Pre-processing P
Method of Coating		Non-woven cloth	Non-woven cloth	Non-woven cloth
Coating and Painting Condition Temperature and Humidity		26 °C 50 %	26 °C 50 %	26 °C 50 %
Drying Condition		Natural Drying	Natural Drying	Natural Drying
Hardening Method		Room Temperature Hardening	Room Temperature Hardening	Room Temperature Hardening
Characteristics of Hardened Film	Film Thickness	about 3 μ	about 10 μ	about 10 μ
	Trace of Brush	None	Yes	Yes
	Color Shading	None	Yes	Yes
	Hardening	2H	H	H
	Alkali Removing of Coating	○	×	×

For testing the "alkali removing of coating", a liquid solution having a pH of 10 and made up of diethanolzmine including aluminum oxide was prepared. A glass board on which a film was coated was rubbed by a sponge after the glass board was allowed to stand for five minutes.

- Coating is removed by not more than 20 times.
- △ Coating is removed by 20 to 100 times.
- × Coating is not removed by not less than 100 times.

DISCUSSION OF RESULTS

As can be seen by the above Table and the enclosed samples, the film-forming composition of the present invention is superior to the film-forming compositions of Nambu, et al. with respect to film thickness, brush trace, color shading, hardening and ease of removal of coating. As such, the film-forming compositions of the present invention are especially suitable for coating windows of automobiles and buildings and provide a uniform coating film which can easily be removed with an alkali.

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application and any patent issuing thereon.

Dated: _____ By: _____

Encl.: Coated glass sampler (3)